

AMENDMENTS TO THE CLAIMS:

Claims 1-10 (Canceled)

Claims 11-19 (Withdrawn)

① 20. (Currently amended) An isolated antibody against ~~the~~ a protein selected from the group consisting of: according to claim 35 or a fragment thereof

(i) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:2, and having serine protease activity;

(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence complementary to nucleotides 110-802 of SEQ. ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);

(iii) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:4, and having serine protease activity;

(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and

(v) a modified derivative of proteins (i) to
(iv).

21. (Original) The antibody according to claim 20, which is a polyclonal antibody, a monoclonal antibody, or a peptide antibody.

22. (Currently amended) A process for producing a monoclonal antibody against the ~~protein~~ protein selected
from the group consisting of:

(i) a protein comprising the amino acid
sequence of residues 1-231 of SEQ ID NO:2, and having serine
protease activity;

(ii) a protein encoded by a nucleotide
sequence which hybridizes to a nucleotide sequence of bases
110-802 of SEQ. ID NO: 1 under stringent conditions, and
having the same serine protease activity as that of the
protein (i);

(iii) a protein comprising the amino acid
sequence of residues 1-231 of SEQ ID NO:4, and having serine
protease activity;

(iv) a protein encoded by a nucleotide sequence
which hybridizes to a nucleotide sequence of bases 132 to 824

SEQ ID NO:3 under stringent conditions, and having the same
serine protease activity as that of the protein (iii); and
(v) a modified derivative of proteins (i) to (iv)
~~according to claim 35 or a fragment thereof which comprises:~~
administering the protein according to claim 35 or a
fragment thereof to a warm-blooded animal other than a human
being;
~~selecting the animal whose antibody titer is~~
recognized;
~~collecting its spleen or lymph node of said warm-~~
blooded animal; and
fusing the antibody producing cells contained
therein with myeloma cells to prepare a monoclonal antibody
producing hybridoma.

23. (Currently amended) A method for determining
the a presence or an amount of a protein selected from the
group consisting of:

(i) a protein comprising the amino acid
sequence of residues 1-231 of SEQ ID NO:2, and having serine
protease activity;

(ii) a protein encoded by a nucleotide
sequence which hybridizes to a nucleotide sequence of bases
110-802 of SEQ. ID NO: 1 under stringent conditions, and

having the same serine protease activity as that of the protein (i);

(iii) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:4, and having serine protease activity;

(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and

(v) a modified derivative of proteins (i) to (iv), according to claim 35 or a fragment thereof in a specimen wherein said method ~~which is based on~~ comprises immunologically binding of an antibody against the protein or a fragment thereof to the protein or a fragment thereof in a sample and determining the presence or amount of the protein or fragment thereof.

24. (Currently amended) A method for determining a presence or an amount of hBSSP5 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against:

(i) a protein comprising the amino acid

sequence of residues 1-231 of SEQ ID NO:2, and having serine protease activity;

(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ. ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i); or

① (iii) a modified derivative of the protein (i) or (ii) and a labeled antibody against the protein (i), (ii) or (iii) the protein (a) or (b) of claim 35 or a modified derivative thereof or a fragment thereof and a labeled antibody with hBSSP5 or a fragment thereof in the specimen to detect a sandwich complex produced.

25. (Currently amended) A method for determining a presence or amount of hBSSP5 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against:

(i) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:2, and having serine protease activity;

(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ. ID NO: 1 under stringent conditions, and

having the same serine protease activity as that of the
protein (i); or

(iii) a modified derivative of the protein (i)
or (ii) the protein (a) or (b) of claim 35 or a modified
derivative thereof or a fragment thereof with labeled hBSSP5
and hBSSP5 or a fragment thereof in the specimen competitively
to detect an amount of hBSSP5 or a fragment thereof in the
specimen based on an amount of the labeled hBSSP5 reacted with
the antibody.

26. (Previously amended) The method according to
claim 23, wherein the specimen is a body fluid.

27-31. (Withdrawn)

32. (Currently amended) A method for detecting
pancreatitis which comprises measuring concentration, in blood
or urine, of the a protein selected from the group consisting
of:

(i) a protein comprising the amino acid
sequence of residues 1-231 of SEQ ID NO:2, and having serine
protease activity;

(ii) a protein encoded by a nucleotide

sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ. ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);

(iii) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:4, and having serine protease activity;

① (iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and

(v) a modified derivative of proteins (i) to (iv). according to claim 35 in blood or urine.

33. (Currently amended) A ~~pharmaceutical~~ composition ~~for detecting pancreatitis~~ which comprises the ~~antibody~~ an antibody against a protein selected from the group consisting of:

(i) a protein having the amino acid sequence composed of 231 amino acids represented by the 1st to 231st amino acids of SEQ ID NO:2, and having serine protease activity;

(ii) a protein encoded by nucleotides

hybridizable to nucleotides complementary to a nucleotide sequence represented by the 110th to 802nd bases of SEQ ID NO:1 under stringent conditions, and having the same serine protease activity as that of the protein (i);

(iii) a protein having the amino acid sequence composed of 231 amino acids represented by the 1st to 231st amino acids of SEQ ID NO: 4, and having serine protease activity;

(iv) a protein encoded by nucleotides hybridizable to nucleotides complementary to a nucleotide sequence represented by the 132nd to 824th bases of SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (iii);

(v) a modified derivative of proteins (i) to (iv);
and a pharmaceutically acceptable carrier.~~according to claim 20.~~

Claim 34 (Canceled)

Claims 35-37 (Withdrawn)

38. (Previously added) The method according to claim 24, wherein the specimen is a body fluid.

39. (Previously added) The method according to claim 25, wherein the specimen is a body fluid.

Claims 40-41 (Withdrawn)

42. (Currently amended) An immunohistochemical method for detecting a protein as a diagnostic marker for a certain disease, wherein the protein is selected from the group consisting of:

(i) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:2, and having serine protease activity;

(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ. ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);

(iii) a protein comprising the amino acid sequence of residues 1-231 of SEQ ID NO:4, and having serine protease activity;

(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and

(v) a modified derivative of proteins

(i) to (iv)

which comprises the steps of:

a) taking a tissue specimen from a subject suspected
of suffering from the disease;

b) contacting the antibody with the tissue specimen;

and

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c) detecting the presence of the diagnostic protein
marker in the tissue specimen by evaluating
immunoreactivity between the antibody and said tissue
specimen. ~~in tissues comprising the protein according to claim~~
~~35 which comprises using the antibody against the protein~~
~~according to claim 35.~~

43. (Currently amended) The method according to
claim 44_42, wherein the marker is used for diagnosis of a
cancer or Alzheimer's disease.
